

Amendments to the Specification:

Please replace the paragraph beginning at page 7, line 7, with the following rewritten paragraph:

11. A nucleic acid construct according to Item 1 wherein the retrotransposon is an IAP element, wherein the nucleic acid thereof has at least one feature selected from the group consisting of repeat of a sequence of tccgggacgagaaaa (SEQ ID NO: 46) in the tRNA binding site immediately located at LTR at the 5' side, and inclusion of two or more repeat sequences ttgcttctgtcttc (SEQ ID NO: 47) in the R region.

Please replace the paragraph beginning at page 19, line 17, with the following rewritten paragraph:

Figure 4 depicts schematic exemplification of efficient transposition by means of modification in the promoter region of the IAP. (A) the structure of a vector used in Example 1; (B) the sequence of a junctional portion between the CMV promoter and the R region (SEQ ID NO: 41); (C) principle of detection of transposition; and (D) detection of transposition by means of transfection into NIH3T3 cell.

Please replace the paragraph beginning at page 20, line 8, with the following rewritten paragraph:

Figure 7 shows effects of the CA promoter. (A) shows the structures of two CA-containing vectors (pCA1gp-neo, pCA2gp-neo) and pCMVgp-neo. (B) shows the sequence of juncture sites of two CA promoters (SEQ ID NOS: 42-43) shown in (A) and the R region. (C) shows the comparison of CA1, CA2 and CMV promoters.

Please replace the paragraph beginning at page 20, line 31, with the following rewritten paragraph:

Figure 10 depicts verification that the first 15 amino acids of the GAG protein are preferable for the transposition (SEQ ID NOS: 44-45). (A) depicts the structure of the vector. It is believed that in comparison with pCA2gp-hrGFP which showed autonomous transposition in Figure 8, gpCA2hrGFP-M1 has introduced mutations in the initiation codon of the gag gene, and subsequently resulted in the initiation of the translation of the second ATG, fifteen amino acids downstream thereto. (B) Shows a study of transposition efficiency: Using the vector of (A), HeLa cells were transfected with the three combinations shown therein, and analyzed for the ratio of GFP-positive cells by

Express Mail No.: EV887980760US
U.S. Application No.: 10/579,936
International Filing Date: November 19, 2004
Preliminary Amendment re Sequence Disclosures

FACS after seven days. As a result, pCA2hrGFP-M1, in which a mutation is introduced in the ATG at the original translation initiation site of the *gag* gene, has attenuated the transposition ability. However, a similar vector that has been transfected with pCA2gp, an expression vector of the *gag-pol* full length, has recovered its transposition ability. Hence, the fifteen amino acids from the translation initiation site of the GAG protein is preferable for its transposition ability.

Please delete the section of the application entitled "Sequence Listing" immediately after the Abstract on page 172 and insert the enclosed Sequence Listing therefor.